10060 - 10183

SPIRAL

NOTEBOOK

682

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Arthur Cronquist,
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10458

10060 - May 10, 1965 | Vol. 585
Garfield Co., Utah.

Barren clay slopes just under the east rim of Waterpocket Fold, 45 miles south of Notom.
Twp. 36 S., R. 9 E., S. 9.
Elevation about 4500 feet.
Coleogyne zone. Leaves conspicuously blue-glaucous.
Petals chlorochroleucous.
Corona purple.

Asclepias cryptoceras Wats.
var. cryptoceras
Asclepias cryptoceras (9)

10061 - May 10, 1965
Garfield Co., Utah.
Rocky sandstone slopes
(some clay intermingled)
just under the east rim of
Waterpocket Fold. Coleo-
gyne zone. Twp. 36S.,
R. 9E., S. 9. Elevation
about 4500 feet. Heads
yellow, with mostly
8 (7-9) rays. Plants
just beginning to bloom

Haplopappus armerioides
(Nutt.) A. Gray

Haplopappus armerioides (5) ✓

10062 - May 10, 1965
Garfield Co., Utah.
Gentle, gravelly, sandy slopes just outside the east rim of Waterpocket Fold, 45 miles south of Notom. Coleogyne zone. Twp. 36 S., R. 9 E., S. 9 or 10, near the corner of sections 9, 10, 15 and 16. Rays mostly 13 (11-14), white on top, pinkish beneath. Plants sparse.

Townsendia incana Nutt.

Townsendia (2) ✓

10063 May 10, 1965
Garfield Co., Utah
Sandy soil in Coleogyne community just outside the east rim of Water-pocket fold, 45 miles south of Notom.
Twp. 36 S., R. 9 E., S. 15.
Elevation about 4700 feet. Plants practically inodorous. Flowers white.

Gilia inconspicua (Smith) Sweet, sens. lat.

Gilia aff inconspicua (9) ✓

10064 – May 10, 1964
Garfield Co., Utah.
Barren clay slopes
in piñon-juniper zone
32 miles south of
Notom, Twp. 34S., R.9E., S. 30
Elevation about 4600
feet. Plants scarce.
Flowers lavender-purple

Phacelia demissa Gray

Phacelia. (2) ✓

10065 - May 10, 1965
Garfield Co., Utah.
Same place as 10064
Leaves conspicuously
blue-glaucous. Flowers
whitish, marked with
dull purple.

Cymopterus
purpurascens (Gray) Jones

Cymopterus (16) ✓

10066 - May 10, 1965
Garfield Co. Utah.
Same place as 10064.
Leaves channeled.
Tepals pale whitish -
lavender, with a
darker midstripe out-
side. Filaments connate

Androstephium breviflorum
S. Wats.

Brodiaea ② ✓ /

10067 - May 10, 1965
Garfield Co., Utah.
Same place as 10064.
Tepals lavender,
with more purplish
midstripe outside.

Allium macropetalum
Rydb.

onion ③ ✓ ✓

10068 - May 10, 1969
Garfield Co., Utah.
Gravelly slopes in
sandstone country,
pinon-juniper commun-
ity, about 32 miles
South of Notom. Twp. 34 S.,
R. 9E., S. 30 Elevation about
4600 feet. Flowers
rich purple, the banner
paler than the wings.
Astragalus desperatus Jones
var. conspectus Barneby
det. R. C. Barneby

Astragalus (1) ✓

10069 - May 10, 1965

Garfield Co. Utah.

Sandy, gravelly soil in piñon-juniper zone at the west side of Capitol Reef, along the Burr Trail, 47 road miles east of Boulder.

Elevation about 5100 feet.

Leaflets 3 or sometimes 5. Flowers pink-purple, the banner paler than the wings and keel. Pods thick-walled, wholly one-celled. Twp. 34S., R.8E., S.16.

Astragalus musiniensis Jones
det. R.C. Barneby

Astragalus (17) ✓ ✓

1[illegible]70 – May 10, 1965

Garfield Co., Utah

Elevation about 5100 feet

Along a dry wash at the west side of Capitol Reef, on the Burr Trail 47 road miles east of Boulder.
Twp. 34 S., R. 8 E., S. 16.
Small, spreading trees about 10 or 12 m. tall. Leaves shiny but not glutinous to the touch, not yet fully expanded. Inflorescence drooping. Fruits mostly 4-carpellate and 8-grooved, some of them 3-carpellate and 6-grooved.

Populus fremontii S. Wats.

Populus fremontii (24) ✓

P 10071 - May 11 1965
Garfield Co., Utah. Sandy banks of a dry wash at the west side of Capitol Reef, along the Burr Trail, 47. road miles east of Boulder. Piñon-juniper zone. Elevation about 5100 feet. Flowers pink-purple, the banner paler than the wings and keel. Calyx notably reddish.
(Twp. 34S., R.8E., S.16.)

Astragalus mollissimus (Torr.) T.&G.
var. thompsoniae (Wats.) Barneby
det. R.C. Barneby
Astragalus (6 ✓

10072. May 11, 1965 Garfield Co., Utah. Open, rocky slopes in sandstone country along the Burr Trail at the west side of Capitol Reef, 47 road miles east of Boulder. Elevation about 5200 feet. Piñon-juniper zone. Flowers mostly white or very nearly so, seldom distinctly lavender. Twp. 34S., R. 8E., S. 16.

Phlox hoodii Rich.

[illegible]

Phlox hoodii (D) ✓

Photo # 4 Populus fremontii

#5 [illegible] at Camp

6+7 Pinon (edulis) - juniper

woodland from 6200'

- East of Boulder - Garfield

Co. Utah 1980 3

10073 - May 11, [illegible]

Garfield Co., Utah. Loose, sandy slopes in pinon-juniper country 10 miles southeast of Boulder, 3 miles past Deer Creek on the road to Burr Trail. Twp. 34S., R. 5E., S.14. Elevation about 5400 feet. Flowers pink-purple, the banner paler than the wings and keel. Calyx wine-red.

Astragalus mollissimus (Torr.) T. & G. var. thompsoniae (Wats.) Barneby

det. R. C. Barneby

[illegible] 10071 (T)

10014 - May 11. 1965

Garfield Co., Utah.

Sandy slopes and flats in pinon-juniper country along Calf Creek about 10 miles south of Boulder.

Twp. 35 S., R. 4 E., S. 1; or Twp. 34 S., S. 36.

Elevation about 4900 feet

Flowers pink-purple, the banner paler than the wings and keel. Calyx winy red. Plants taprooted, developing a multicipital caudex in age.

Astragalus mollissimus (Torr.) T.&G. var. thompsoniae (Wats.) Barneby

astragalus (32) ✓

10075 – May 11 1965.
Garfield Co., Utah.
Sandy flats along
Calf Creek, about 10
miles south of Boulder,
in piñon-juniper country.
Twp. 35 S., R. 4 E., S. 1; or Twp. 34 S., S. 36.
Elevation about 4900
feet. Flowers vermilion-
red to crimson.

Gilia subnuda Torr.

N. H. ④ ✓

1076 - May 11, 1957
Garfield Co., Utah.
Sandy, gravelly slopes along Calf Creek, in pinon-juniper country about 10 miles south of Boulder. Same loc. R.I.S. as 1075
Elevation about 4900 feet.
Rays 10-17, white inside, dull pinkish outside.

Townsendia incana Nutt.

Townsendia (?) ✓

10077 - May 11, 1965
Garfield Co., Utah.
Rocky, sandstone slopes
in piñon - juniper country
along Calf Creek about
10 miles south of Boulder.
Twp. 35 S., R. 4 E., S. 1.
Elevation about 4900 feet.
Flowers pale lavender to
lavender purple.

Arabis perennans Wats.

arabis (3) ✓

10078 May 12, 1965
Kane Co. Utah,
Gravelly sloped (the stones rounded, water-worn) in piñon-juniper community overlooking Paria Creek, 4 miles south of Cannonville. Twp. 38S, R2W., S.7. Elevation 5300 feet. Flowers bright pink purple.

Astragalus amphioxys Gray var. vespertinus (Sheld.) Barneby
det. R. C. Barneby

Astragalus (22) ✓

10079 – May 12, 1965

Kane Co., Utah

Gravelly slopes (the stones rounded, waterworn) near the top of a small ridge overlooking Paria Creek, in piñon-juniper community, 4 miles south of Cannonville, Twp. 38S., R.2W., S.7, 5500 feet elevation.

Flowers purple. Pods arcuate-spreading. Growing with # 10080, A. pendulina, but clearly distinct.

Arabis perennans Wats. ✓

(9)

[illegible]

[illegible] May 12, 1965
Kane Co. Utah
Same place as 10077.
Flowers rather pale lavender.
Pods descending at an angle. Growing with
10079 A. perennans, but clearly distinct

Arabis pendulina Greene

✓

Arabis - descending pod (35) ✓

10081 - May 12, 1965

Kane Co. Utah

Same place as 10078.

Flowers rich pink,

sweet-scented.

Abronia nana S. Wats.

✓

Abronia

(7) ✓

10[illegible]2 - May 12, 1905
Kane Co., Utah
Same place as 1007[illegible].
Rays about 13, white inside, dull pinkish outside. Plants scarce.

Townsendia incana Nutt.

Townsendi[illegible] (4) ✓

[illegible] - May 12, 1965.

Kane Co., Utah

Same place as 10078, but 5400 feet elevation.

Flowers sweet-scented white to lavender-purple.

Phlox hoodii Rich.

Phlox hoodii (4)

10084

May, 15, 1965

Mohave Co., Arizona

Sandy soil near the south base of Steamboat Rock, 2 miles west of Fredonia.

Twp. 41 N., R.3W., S. 24.

Elevation about 4700 feet.

Flowers, dull light blue. Cauescent, the banner paler than the wings and keel

Lupinus kingii S. Wats.

Lupine (19) ✓

May 15, 1965 #10085
Mohave Co., Ariz.
Same place as 10084. Plants creeping extensively below ground and becoming colonial by filiform horizontal roots, sometimes also eventually tapered. Flowers soft lavender. Mature pods pendulous, inflated, mottled with reddish-brown.

Astragalus ceramicus Sheld.
var. ceramicus
det R.C. Barneby

Astragalus ⑦

10086 - May 15, [illegible]
Mohave Co., Arizona.
Edges of barren clay slopes at the south end of Steamboat Rock, 2 miles west of Fredonia.
Twp. 42 N, R. 3 W., S. 24.
Elevation about 4700 feet.
Bracts scarlet to crimson.

Castilleja chromosa A. Nels.

Castilleja (5) ✓

10087 May 15, 1965.
Mohave Co., Arizona.
Sandy clay flats over-
looking Cottonwood
Creek, near Steamboat
Rock, 2 miles west of
Fredonia Twp. 40 N, R.
3 W., S. 24. Elevation
about 4700 feet. Plants
[illegible]. Leaves channeled
Perianth segments with
greenish midstripe
outside, otherwise dull
whitish, faintly laven-
der tinted.
Androstephium brevi[illegible]
[illegible] ① ✓ [illegible]

16058 - May 16, 1965
Mohave Co., Arizona. In open piñon-juniper woodland on rocky (sandstone) east slope overlooking a creek two miles northeast of Cane beds and 33 miles southeast of Hurricane.
Twp. 41 N., R. 5 W., S. 7 or 18.
Elevation about 5300 feet.
Leaves blue glaucous. Flowers ranging from true red (seldom) to crimson, deep pink, or pink-purple. Plants visited by hummingbirds.
Penstemon utahensis Eastw.
Penstemon (8) ✓

10089 — May 16. 1965
Mohave Co., Arizona. Same place as 10088. Plants forming mats suggestive of those of P. hoodii, but looser, with more evidently erect stems. Leaves very pungent. Flowers bright pink-lavender to white.

Phlox austromontana
Coville

Phlox ... [illegible] (13)

1 00?0 - May 16, 1965
Mohave Co., Arizona
Same place as 10088.
Flowers bright
pink-purple, the banner
with a large central
paler spot.

Astragalus amphioxys Gray
var. vespertinus (Sheld.)
Barneby
det. R.C. Barneby

[illegible] (2)

11091 – May 16, 1905
Mohave Co., Arizona.
same place as 1056

Arabis perennans Wats.

Arabis ① ✓

10092 - May 16. 1965
Washington Co., Utah.
With scattered junipers and sagebrush on low, sandy ridge in the desert 20 miles southeast of Hurricane.
Elevation about 4900 feet.

Gilia inconspicua (Smith) Sweet, sens. lat.

Gilia (16) ✓

11093 - May 16, 1965
Washington Co., Utah.
Same place as 10092.
Corolla limb white
the throat yellowish.

Phacelia ivesiana Torr.

Phacelia ivesiana ⑥

10094 – May 16, 1965
Washington Co. Utah.
Same place as 10092,
Flowers yellow.

Oenothera contorta
Dougl.
var. flexuosa (A. Nels.) Munz

Oenothera (3) ✓ 1

10095 – May 16, 1965
Washington Co., Utah
Same place as 10092.

Chorizanthe thurberi
(Gray) S. Wats.

Chorizanthe (35)

10096 May 16, 1965
Washington Co., Utah
Same place as 10092.
Flowers minute, white.
Nutlets all alike, slightly roughened on the back, about 1mm long.

Cryptantha circumscissa (H. & A.) Johnst.

Cryptantha circumscissa (4)

10097 - May 16, 1965. Washington Co., Utah. Open, piñon-juniper woodland on rocky (sandstone) north slope 12 miles southeast of Hurricane. Elevation about 4700 feet. Plants mat-forming, but the flowering stems erect. Leaves very pungent. Flowers ranging from pink-purple to pink-lavender to nearly white

Phlox austromontana Coville

(10)

[illegible]

10098 - May 16, 1965
Washington Co., Utah
With sagebrush at the
bottom of a north-
facing sandstone
slope, 12 miles
southeast of Hurricane.

Elevation about 4700 feet
Leaves glaucous. Flowers
dull blue-lavender
the wings nearly white.

Astragalus ensiformis Jones
det. R. C. Barneby

717
Astragalus (E) ✓

10099 - May 17, 1965

Washington Co., Utah.
Around the base of volcanic basalt ledges in sage-brush-Coleogyne zone in the desert 7 miles southeast of Hurricane. Twp 42S., R. 12W. Elevation about 4500 feet. Stems cluster-ed on a taproot and branching caudex. Flowers orange-red.

Sphaeralcea parvifolia
A. Nels.

Sphaeralcea 721 ✓

10100 - May 17, 1961
Washington Co., Utah:
In sagebrush-Coleogyne com-
munity on soil derived from
basalt, 7 miles southeast
of Hurricane, Twp. 42S.,
R. 12W. Elevation about
4500 feet.
Petals soft cream with
a yellow rimmed, orange-
hairy, half-moon-shaped
gland above a truncate-
cuneate basal red spot.

Calochortus flexuosus S. Wats.

Calochortus (2) ✓ ✓

10101 - May 17, 1965
Washington Co., Utah.
In sagebrush - Coleogyne
community in the desert
7 miles southwest of
Hurricane. Twp 42S.,
R.12W. Elevation about
4500 feet. Sweetly
aromatic shrub about
1 m. tall. Petals pale
ochroleucous, almost
white.

Cowania stansburiana
Torr.

"[illegible]" (3) ✓

10152 May 17, 1961
Washington Co., Utah.
Sagebrush-Coleogyne
community in the desert
7 miles southeast of
Hurricane. Twp. 42S.,
R. 12W. Elevation about
4500 feet. Shrubs
up to about 6 dm. tall,
leaves ternate

Ephedra torreyana Wats.

Ephedra (22) ✓

10103 - May 17, 1961
Washington Co. Utah.
Sandy soil in the desert near the Virgin
River 12 miles northeast
of St. George. Twp 42 S.,
R. 14 W. Elevation about
2800 feet. Flowers minute,
white. Root reddish.
Nutlets slender, all the
same size, 1.0-1.1 mm long,
in some plants all tuberculate,
in others 3 smooth and
one tuberculate
Cryptantha micrantha
(Torr.) Johnst.

Cryptantha 35

10104 - May 18, 1965
Washington Co., Utah.
Rocky sandstone slopes overlooking the Virgin River, 12 miles northeast of St. George. Twp. 42S, R. 14W. Elevation about 2800 feet. Flowers pink-purple, opening in late afternoon, wilting in the morning sun. Stems clustered on a stout taproot.
This same species observed on slopes along the river all the way upstream to Zion National Park.
Mirabilis Froebelii (Behr) Greene
Mirabilis froebelii (4) ✓

10105 May 18, 1965
Washington Co. Utah.
Sandy soil in the desert
along the Virgin River
12 miles northeast of St.
George. Twp. 42 S., R. 14 W.
Elevation about 2.800 feet.
Shrubs 1-3 m. tall, heavy-
scented, widely scattered
and not forming a char-
acteristic Larrea commun-
ity. Flowers bright
yellow.

Larrea divaricata Cav.
(L. glutinosa)

Larrea (35) ✓

10106 - May 18, 1965
Same place as 10105
Sweet-scented shrubs
mostly 4-7 dm. tall.

Hymenoclea Salsola T. & G.

Hymenoclea (35) ✓

10107 - May 18, 1965.
Same place as 10105.
Shrubs up to nearly 1 m. tall. Spiny branches of the season still relatively soft and pliable. Flowers yellow, soon fading to ochroleucous.

Tetradymia spinosa H. & A.
var. longispina M.E. Jones

Tetradymia (35) ✓

10108 - May 18, 1965
Same place as 10105.
Low, broadly rounded
shrubs mostly 3-4 dm.
tall. Plants widely
scattered, not a dominant
element in the mixed
community.

Ambrosia (Franseria)
dumosa (A. Gray) Payne

"Franseria" (15) ✓

10109 May 18, 1965.
Same place as 10105.
Shrubs up to nearly
1 m. tall. Flowers
intense deep blue-violet.

Dalea fremontii Torr.

Dalea fremontii (12) ✓

10[illegible]8 - May 18, 1965.
Same place as 10105.
Stems numerous, clustered on a stout taproot, loosely ascending from a turning base.
Perianth white.

Mirabilis bigelovii Gray
var. retrorsa (Heller) Munz

white Mirabilis (16)

1011 - May 15, 1965
Same place as 10105.
Deep-rooted perennials.
Perianth white.

Abronia fragrans Nutt.

1164

abronia (11) ✓

10112 - May 19, 1965
Same place as 10105.
Shrubs up to about 8 dm.
tall. Disk orange.
Rays yellow, mostly
12-22.

Encelia frutescens A. Gray
var. virginensis (A. Nels.) Blake

Blake

Encelia (16) ✓

10113 - May 19, 1965.

Same place as 10105.
Corolla limb blu. Lav-
ender, distinctly irreg-
ular. Stamens very
unequal.

Eriastrum eremicum
(Jeps.) Mason

!

Eriastrum (4) ✓

10[illegible] – May 19, 1965
Same place as 10105.
Perianth-segments
whitish, with
reddish midstripe out-
side.

Eriogonum maculatum
Heller
det. James Reveal

[illegible] (7) ✓

10115 – May 19, [illegible]5

Same place as 10105.
Disk orange-yellow.
Rays yellow, mostly 8.

Eriophyllum wallacei A. Gray

Eriophyllum (6)

10112 · May 19, 1965.
Same place as 10105.

Cryptantha recurvata
Cov.

Cryptantha (5) ✓

10117 - May 19, 1965
Washington Co., Utah
Crevices and ledges of
shelving sandstone
rocks along the Virgin
River 12 miles northeast
of St. George. Twp. 42S.,
R. 14 W. Elevation about
2800 feet. Flowers white.
Stems numerous, densely
tufted from an eventual
taproot. Smaller plants
mat-forming, as in A.
congesta; larger ones
looser and shrubby for
up to 3 dm. at the base.
Arenaria macradenia Wats.
var. macradenia
Arenaria (35) ✓

10118 - May 19, 1965
Same place as 10105.
Low, rounded shrubs
about 3 dm. high.
Heads yellow.

Acamptopappus
sphaerocephalus (Harv.
& Gray) A. Gray

Acamptopappus (7) ✓

10119 - May 19, 1965.

Same place as 10107.
Much branched low shrubs, Perianth segments white or faintly pinkish, with a redder midstripe outside.

Eriogonum fasciculatum Benth.
var. polifolium (Benth.) T. & G.

det. James Reveal

[illegible] 20

10120 — May 19, 1965.
Rocky sandstone slopes along the Virgin River about 12 miles northeast of St. George.

Elevation about 2800 feet
Plants half-shrubs, up to about 7 or 8 dm. tall.
Rays 38-56, rather light blue-lavender, or seldom white.

Machaeranthera tortifolia
(T. & G.) Cronq. & Keck
var. tortifolia
Machaer. torti/ typ (16)

10121 - May 19, 1965
Kane Co., Utah.
Forming great colonies
locally along the road-
side in sandy soil in
piñon-juniper zone
8 miles west of
Mt. Carmel. Twp. 41S., R.
8W., S. 8 Elevation
about 5800 feet.
Plants spreading freely
below ground. Flowers
rich pink.

Lathyrus zionis C.L. Hitchc.

[illegible]

[illegible] (10) ✓

10122 May 20, 1965
Kane Co., Utah - Sandy clay soil in juniper-sagebrush community 25 miles east of Kanab. Twp. 42 S., R. 3 W., S. 33. Elevation about 5500 feet. Growing with 10123, G. inconspicua, but sharply distinct. Plants mildly malodorous, but not mephitic. Corolla throat yellowish, the limb very pale lavender (deeper lavender outside), the lobes coarsely tridentate. Basal leaves forming a rosette on the ground.

Gilia leptomeria Gray.

[illegible] (white) (4) ✓

10123 - May 20, 1965. Same place as 10122. Growing with #10122, G. leptomeria, but sharply distinct.

Plants mephitic. Corolla throat yellowish, the limb lavender, leaves more or less ascending, not forming a basal rosette.

Gilia inconspicua (Smith) Sweet, sens. lat.

Gilia ofiin... (11) ✓

10124 - May 20, 1965
Same place as 10122

Corolla rather pale lavender, with darker lines. Palate and staminode conspicuously bearded.

Penstemon sp.

Penstemon ⓧ ✓

10125 - May 20, 1965.
Same place as 10122. Flowers
blue-violet.

Penstemon thompsoniae
(Gray) Rydb.

Pluslimon (3) ✓

10126 - May 20, 1965.
Same place as 10122.
Plants spreading
vigorously below the
ground. Flowers
bright pink.

Phlox longifolia Nutt.

phlox (8) ✓

10127. May 20 1965

Kane Co., Utah. In barren clay soil in juniper-sagebrush region near the top of a small ridge in the desert 25 miles west of Kanab, Twp. 42S., R.3W., S. 33. Elevation about 5500 feet. Old flowers dark blue-violet. Pods inflated, strictly unilocular.

Astragalus megacarpus (Nutt.) Gray

det R.C. Barneby

Astragalus (17)

10138 - May 20. 1965
Kane Co. Utah. Sandy clay soil in juniper sagebrush region on a small-ridge in the desert 25 miles east of Kanab. Twp. 42S., R.3W., S.33. Elevation about 5500 feet. Flowers bright pink-purple. Pods green, wholly one-celled, speckled with reddish-brown, somewhat compressed dorsiventrally.

Astragalus amphioxys Gray var. vespertinus (Sheld.) Barneby
det. R.C. Barneby

[illegible] (11)

10129 - May 20, 1965.
Kane Co., Utah. Under junipers atop a small ridge in the desert 25 miles east of Kanab, Twp. 42 S., R.3W., S. 33. Elevation about 5500 feet. Flowers white, turning pink in age.

Oenothera pterosperma Wats.

Oenothera (2)

10:30 May 20 1965

Kane Co, Utah. Barren, gravelly clay slopes on the west side of Paria River, just upstream from the abandoned settlement of Paria. Twp. 41S., R. 1W., S. 18. Elevation about 4700 feet. Perianth yellow.

Eriogonum flexum M.E. Jones

det. James Reveal

[illegible]

(35) ✓

10131 - May 21, 1965
Kane Co., Utah. On the less
extreme sites on barren
clay slopes along the west
side of the Paria River, just
upstream from the aban-
doned settlement of Paria.
Twp. 41 S, R. 1 W., S. 18.
Elevation about 4700 feet.
Stems several or solitary
on a taproot, prostrate,
mostly to ascending tips.
Corolla-lobes dull
ochroleucous, the
Corona purple.
Asclepias cryptoceras Wats.
var. cryptoceras
Asclepias cryptoceras (8) ✓

10:32 - May 21, 1965
Kane Co., Utah

In the base & the more gravelly parts of barren clay slopes on the west side of the Paria River, just upstream from the abandoned settlement of Paria. Twp. 41S., R.1W., S.16. Elevation about 4700 feet

Astragalus newberryi Gray
var. newberryi

det R.C. Barneby

Astragalus - dwarf (5)

10133 - May 21, 1965 - May 21, 1965. Same place as 10132
Leaves solid, subterete, broadly elliptic in cross-section, except toward the base, where broadly and shallowly channeled. Perianth segments with a reddish-lavender midstripe, otherwise white or nearly so. Crests of the ovary conspicuous, narrow, about 2 mm long
Allium nevadense S.Wats.

o.k. 13 ✓

10134 - May 21, 1965.
Same place as 10132.
Plants mephitic.
Leaves more or less closely
ascending, not forming
a flat basal rosette.
Corolla limb pink-laven-
der, the throat yellowish.
Growing with #10135,
G. leptomeria, but
sharply distinct.

Gilia inconspicua (Smith)
Sweet, sens. lat.

Cor. Gilia (20) ✓

10135 - May 21, 1965,
Same place as 10132. Plants
malodorous, but not
mephitic. Leaves bright
green, forming a basal
rosette flat on the ground.
Corolla throat yellow,
the limb appearing white
from above, more lavender
from beneath, the lobes
markedly tridentate

Gilia leptomeria Gray

[illegible] (TH) ✓

10136 - May 21, 1965
Leaves bright green.
Flowers probably yellow,

Cymopterus purpureus
Wats.

formation ② ✓

10137. May 21, 1965.
Same place as 10132.
Petals white, with a crescent-shaped maroon spot above a whitish-hairy gland that is narrowly maroon-rimmed and otherwise surrounded by a yellow area.

Calochortus flexuosus
S. Wats.

Collected ... (6) ✓

10150 - May 21, 1965
Same place as 10132.
Flowers white or
very faintly laven-
der-tinted, turning
ochroleucous in age.

Astragalus flavus Nutt.
var. candicans Gray
det. R.C. Barneby

([illegible]) (10)

10139 - May 21, 1965.
Same place as 10132.
Plants fairly abundant
but just beginning to
bloom. Disk yellow
Rays about 7-13, white.

Machaeranthera
glabriuscula (Nutt.) Cronq.
var. confertifolia Cronq.

Machaeranthera (1) ✓

10140 - May 21, 1965
Kane Co., Utah. Sandy, gravelly soil in juniper-sagebrush region in the desert 40 miles east of Kanab. Twp. 42 S., R. 2 W., S. 24 or 25. Elevation about 5000 feet. Petals soft lavender, with an orange-hairy gland in a basal maroon and yellow spot. Anthers dull lavender.
Calochortus flexuosus S. Wats.

Calochortus (7) ✓

10141 - May 21, 1965
Same place as 10140.
Herbage glaucous. Flowers bright blue (seldom lavender-purple). The upper petals nearly white.

Delphinium andersonii
Gray

[illegible] (13) ✓

10142 - May 31, 1965
Same place as 10140.
Stems clustered on a
taproot, loosely
[illegible] ascending.
Flowers pale lavender.

Astragalus eremiticus
Sheld.

1502
Astragalus (21) ✓ ✓

10143. May 22, 1965 - Kane Co.,
Utah. Very sandy soil
in the desert a scant mile
west of Glen Canyon City,
and about 57 miles east of Kanab.
Twp. 42 S. R. 3 E. S. 3
Elevation about 4300 feet
Annual. Stems widely
spreading ascending.
Leaves bright green
above, pale beneath.
Perianth whitish or
pale pinkish. ~~Growing~~
~~with~~ ~~10160~~, &c.

~~[illegible]~~

Tripterocalyx wootoni Standl.
abronia (11)

10144 – May 22, 1965
Same place as 10143?
Corolla lavender

Coldenia canescens DC.,
sens. lat.

Perhaps an undescribed variety.

Boragi (2)

10105. May 22. 1965.
Kane Co., Utah. Same place
as 10143. Stems clustered
on a perennial taproot.
Flowers bright pink-
-purple, the banner
with a large central
whitish spot.

Astragalus amphioxys
Gray
var. amphioxys
det. R. C. Barneby

[illegible]

(19) ✓

10146 May 22, 1965
Same place as 10143.
Leaves erect, forming a central tuft at the base. Heads yellow. Pappus bright white, quickly deciduous except for 2 more persistent awns.

Malacothrix glabrata
A. Gray.

Memories? (5) ✓

10147 - May 23, 1965
Same place as 10143.

Leaves forming a rosette flat on the ground. Heads yellow, Pappus bright white, wholly deciduous.

Malacothrix sonchoides
(Nutt.) T. & G.

13 ✓

10[illegible] May 22, 1965
Same place as 10143
Plants annual. Leaves glaucous. Flowers deep blue, the banner with a large central white spot.

Lupinus kingii S. Wats.

Lupini (14) ✓

10149 May 22 1965
Same place as 10143.

Plants highly variable in leaf dissection, the variation not evidently correlated with anything else. This number represents the least dissected phase of the continuously variable population — Cf. no's. 10150 and 10151.
Flowers brick-orange.
Stems several, clustered and [illegible].

Sphaeralcea parvifolia A. Nels.

[illegible]

10150 May 22, 1965

Same place as 10143

Stems several, clustered on a taproot, Flowers brick-orange, Plants highly variable in leaf-dissection, This number represents the average between the two extremes of a continuously variable population. Cf. nos. 10149 and 10151.

Sphaeralcea. Intermediate between S. parvifolia and S. grossulariaefolia as treated by Kearney.

Sphaeralcea [illegible]

(12)

10151 - May 22, 1965
Same place as 10143
Stems several, clustered on a taproot. Flowers brick-orange. Plants highly variable in leaf-dissection. This number represents the most dissected phase of a continuously variable population. Cf. no's. 10149 and 10150.

Sphaeralcea grossulariaefolia (H. & A.) Rydb.
var. pedata (Torr.) Kearney

Sphaeralcea ... [illegible] 12

10152 - May 22. 1965
Same place as 10143.
Corolla white, with
a yellowish throat.
Seeds cross-corrugated.

Phacelia ivesiana Torr.

phacelia (15) ✓

10153 - May 22, 1965

Same place as 10143.
Corolla white.

Dithyrea wislizeni Engelm.

[illegible] (6) ✓

[illegible] - May 22 1966

Same place and date as 3. Plants malodorous but not mephitic. Leaves bright green, forming a flat rosette at or a little above the ground surface. Corolla throat yellowish, the lobes spreading, dull whitish-lavender, tending to be mucronate or shortly cuspidate.

Gilia leptomeria Gray

rosette Gilia (15)

10155 - May 22, 1965
Same place as 10143.
Corolla white.

Cryptantha pterocarya
(Torr.) Greene
var. pterocarya

[illegible] ⑥

10156 - May 22, 1949
Same place as 10143.
Rays mostly 19-23
(commonly 21), white
above, dull pink-
lavender beneath

Townsendia incana Nutt.

19-23

Townsendia (5) ✓

10157 – May 22, 1965
Same place as 10143
Corolla white.
Nutlets muricate,
3 of them 1.5 mm long,
readily deciduous, deeply
excavated ventrally;
the fourth 2.0 mm,
persistent.

Cryptantha crassisepala
(T. & G.) Greene

[illegible] (5) ✓

10148 - May 22. 1965
Same place as 10143.
Heads bright white.

Chaenactis stevioides
H. & A.

Chaenactis (4)

10159 - May 22, 1965.
Same place as 10143
Plants aromatic.
Heads bright yellow.

Hymenopappus filifolius
Hook.
var. pauciflorus (Johnston)
Turner

(8) ✓

10160 - May 22, 1965
Same place as 10143
Plants perennial,
spreading below ground.
Flowers white. ~~Growing
with # 10143, a~~
~~, but sharply
distinct,~~

Abronia fragrans Nutt.

abronia (11) ✓ ✓

10161 - May 22, 1965
Same place as 10143.
Corolla white, even
the fornices. Only
a few plants seen.

Cryptantha jamesii
(Torr.) Payson
var. disticha (Eastw.) Payson

white, [illegible]

Perennial. [illegible]. (1)

10162 - May 22, 1965
Same place as 10143.
Corolla white,
perhaps with a
faint bluish cast.

Gilia gunnisoni T. & G.

white
Gilia (D) ✓

10163 – May 22, 1965
Same place as 10143.
Root red. Corolla
minute, white.

Cryptantha
circumscissa (H. & A.)
Johnst.
var. circumscissa

(4)

10464 May 25, 196[illegible]
Kane Co. Utah
In pockets of sand over-
lying sandstone rocks
in the desert 2 miles west
of Glen Canyon City and
56 miles east of Kanab.
Twp. 43S. R. 2E. S. 9
Elevation about 4400 feet.
Plants taprooted, forming
a mat with short, erect
leafy flowering branches.
Leaves very pungent.
Flowers pink purple.
Astragalus kentrophyta Gray
var. coloradoensis Jones
det. R.C. Barneby
Astragalus kentro ③ ✓

[illegible]. May 23, 1965

Kane Co., Utah. In very sandy soil about a rocky point 2 miles west of Glen Canyon City and about 56 miles east of Kanab. Twp. 43 S., R. 2 E., S. 9. Elevation about 4400 feet. Stems clustered on a ~~stout~~ taproot and branching caudex. Flowers yellow, the corolla limb fading to ochroleucous in age, but the fornices remaining yellow. Nutlets smooth, sharp-edged; not all maturing

Cryptantha flava (A. Nels.) Pays.

yellow Cryptantha (16) ✓

10166 - May 23, 1965
Same place as 10165.
Stems few or solitary
on a taproot. Corolla
white, even the fornices.
Nutlets smooth,
sharp edged.

Cryptantha jamesii
(Torr.) Payson
var. disticha (Eastw.)
Payson

white flower Crypt. (5) ✓

10167 - May 23, 1965
Same place as 10165.
Stems clustered on a
taproot and branching
caudex. Rays mostly
19-32, blue-lavender.

Erigeron utahensis A. Gray
var. utahensis

32
[illegible] (3) ✓

10168 May 23, 1965
Same place as 10165.
Stems clustered on a stout, branching caudex which surmounts a more or less definite taproot. Heads yellow, with mostly 10-20 (often 13) rays, these persistent, becoming reflexed.

Hymenoxys scaposa (DC.) Parker var. linearis (Nutt.) Parker

Hymenoxys (15) ✓

10169 - May 23, 1965

Same place as 10165.
Leaves bright green.
Flowers yellow.

Cymopterus newberryi
(Wats.) Jones

[illegible] ② ✓

10170 - [illegible] 1966.

Same place as 0155.

Corolla blue-lavender.

Plants on mat

ill-scented. Seeds

2 in each locule.

Phacelia crenulata

Torr., sens. lat.

Phacelia crenulata (16)

10171 May 23, 1965
Same place as 10165.
Much-branched shrubs
forming broad, low
mounds which catch
the drifting sand. Plants
pleasantly aromatic.
Flowers bright
blue-lavender some
plants paler than others.

Salvia dorrii (Kell.) Abrams,
sens. lat.

[illegible] (21) ✓

13172 May 22, 1925
Same place as 10165.
Much branched, pleasantly aromatic shrubs forming broad, low mounds which catch the drifting sand.
Flowers rather light blue. Lavender.

Poliomintha incana
(Torr.) Gray

[illegible]

[illegible] (22)

10173 - May 23, 1965
Kane Co., Utah Very
sandy soil around the
edge of big sand dune
$1\frac{1}{2}$ miles east of the Paria
River and 12 miles west
of Glen Canyon City,
45 miles east of Kanab.
Flowers lavender. Pods
heavily marked with dark
brick red on a pale background.
Twp. 43 S., R. 1 W., S. 2.
Elevation about 4500 feet.

Astragalus ceramicus Gray
var. ceramicus
det R.C. Barneby
astragalus (14) ✓

10174 - May 23, 1925.
Same place as 10173.
Plants deep-rooted,
and also with slender
creeping roots. Flowers
brownish.

Coldenia canescens DC.,
sens. lat.
Perhaps an undescribed variety

Borage (13)

10175 - May 23, 1965
Same place as 10173.
Flowers dull yellowish.

Asclepias involucrata Engelm.

asclepias (3) ✓

10176 - May 23, 1965.
Same place as 10173.
Plants annual. Flowers
bright blue, the banner
with a central white
spot.

Lupinus pusillus Pursh
var. rubens (Rydb.)

lupine - annual (+) ✓

10177 May 23, 1965.
Same place as 10123
Plants extensively
creeping below ground.
Leaves somewhat glaucous
Flowers dull whitish.

Comandra umbellata (L.) Nutt.
var. angustifolia (A. DC.) Torr.
(C. pallida)

Comandra (5) ✓

10178 - May 23, 1965.
Same place as 10173.
Plants annual.
Perianth limb white,
the lobes bisected.

Tripterocalyx wootoni
Standl.

abronia (5) ✓

10179. May 23, 1965.
Same place as 10173.
Corolla white

Gilia gunnisoni T. & G.

/ . 2 ✓

10180 May 24, 1965
Nye Co., Nevada.
~~Sandy~~, Alkaline rising
in the desert just east of
Currant. Assoc. with
Atriplex, Grayia, Tetra-
dymia Twp. 10 N. R. 58 E.,
S. 8. Elevation about 5200
feet. Perianth rich
pink, opening in late
afternoon.

Hermidium alipes S. Wats.

Mirabilis (6) ✓

10181 - May 24, 1965

Nye Co., Nev. ~~Sandy~~,
alkaline ridges in the
desert just east of Currant.
Assoc. with Atriplex,
Grayia. Twp. 10 N., R. 58 E.,
S. 8. Elevation about 5200
feet. Intricately
branched low shrubs
up to about 7 dm. tall.

Tetradymia spinosa H. & A.
var. spinosa

Tetradymia spinosa

10182 - May 24, 1925.
Same place as 10180.
Petals inconspicuous
purplish.

Thelypodium laciniatum
(Hook.) Endl.

Streptanthus ? ✓

10183. May 24, 1965.
Rather alkaline gentle slopes in the desert just east of Currant. Nye Co., Nevada. Twp. 10N, R. 58E., S. 8. Elevation about 5200 feet. Plants scarce.

Astragalus newberryi Gray
var. newberryi
det. R. C. Barneby

10
[illegible] (1) ✓

around V.R. 1775.7

845.2 Montgomery

848.9 at Carmel jct.

863.2 to Carmel

875.8 at Lobitos

[illegible] app cold [illegible]

[illegible] [illegible]

[illegible] Pinia jct.

911.8 to Pinia

[illegible] at highway

[illegible] [illegible] 9.5

927.0 Pole Pinia

58.9 Page

[illegible] highway

2713 [illegible]

1535.8 Junction [illegible]

1605 [illegible]

1608.6 [illegible]

613 [illegible]

1617.9 at [illegible] Res. [illegible]

[illegible]

[illegible]

651.65 [illegible]

655.8 Cave Lake jet

1660.6 [illegible]

621 [illegible]

649 at [illegible] sand

720 at [illegible]

841.2 Hurricane

1755 [illegible]

1763 [illegible]

13 + 3,8 [illegible]

[illegible] at [illegible]

71.2 at Bear Trail

73.6 at Camp.

98.4 at [illegible] sandy slopes

[illegible] 5000

401.7 [illegible]

403.1 [illegible] ?

[illegible]

1040 [illegible]

73.7 [illegible]

77.6 [illegible] Camp

81.0 [illegible]

89.8 [illegible]

412.6 1st Camp [illegible]

[illegible]

[illegible]

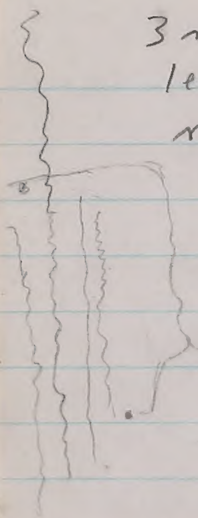
56 [illegible]

3 rev. to right to D'E

left. 2nd around on J.

right to D.

~~turn key to left.~~



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        11.1
135 ) 1502
      135
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       152
       135
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       170
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677.0